
Smooth and Unrestricted Roads and Bridges

*Tangible Result Driver – Kevin Keith,
Chief Engineer*

MoDOT's customers have said they want smooth roads. Smoother roads mean less wear on vehicles, safer travel and greater opportunity for economic development. MoDOT will delight its customers by providing smooth and unrestricted roads and bridges. MoDOT recognizes that road projects built and maintained to a high standard of smoothness will be more efficient. MoDOT must provide customers with smooth roads – because everyone riding on a road can feel whether it is smooth or not!



Smooth and Unrestricted Roads and Bridges

Percent of major highways that are in good condition

Results Driver: Kevin Keith, Chief Engineer

Measurement Driver: Jay Bledsoe, Transportation System Analysis Engineer

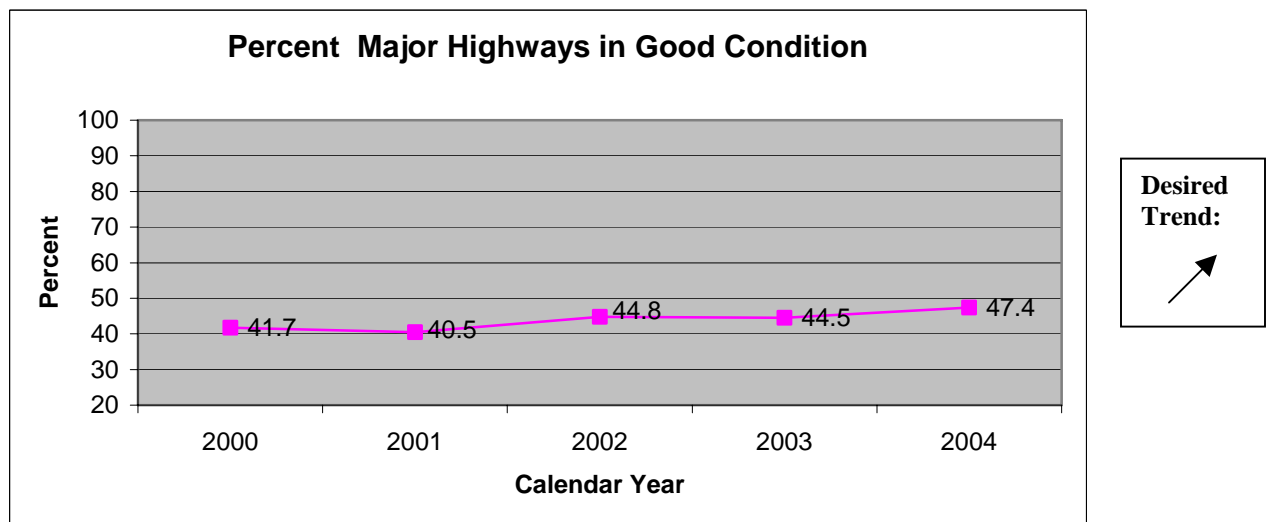
Purpose of the Measure:

This measure tracks the condition of Missouri's road surfaces. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities.

Measurement and Data Collection:

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate system or most US routes such as US 63, US 54 or US 36. In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis. The major roads in Missouri total approximately 5,400 centerline miles.

Good condition is defined using a combination of criteria. On high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower speeds routes (mostly urban areas) where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.



Smooth and Unrestricted Roads and Bridges

Percent of minor highways that are in good condition

Results Driver: Kevin Keith, Chief Engineer

Measurement Driver: Jay Bledsoe, Transportation System Analysis Engineer

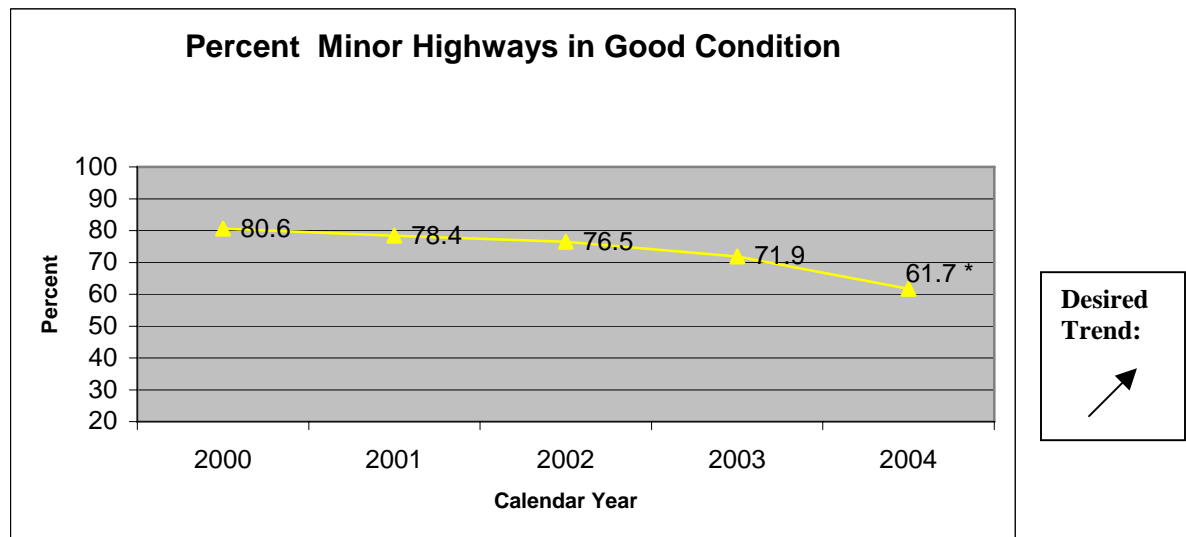
Purpose of the Measure:

This measure tracks the condition of Missouri's road surfaces. The public has indicated the condition of the existing state roadway system should be one of Missouri's highest priorities.

Measurement and Data Collection:

The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes serve more local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads. Minor roads in Missouri total approximately 27,000 centerline miles.

Good condition is defined using a combination of criteria. Where available, on high-speed routes (speed limits greater than 50 mph) the International Roughness Index (IRI) is used. For lower speed routes where smoothness is less critical, a Present Serviceability Rating (PSR) is used. While smoothness is a factor in PSR, physical condition is also a factor.



* 2004 results based on a combination of approximately 11,000 miles rated using automated methods and district manual ratings. Prior years based only on manual district ratings. Development of a process to transition to centralized rating is underway.

Smooth and Unrestricted Roads and Bridges

Percent of deficient bridges on major highways

Results Driver: Kevin Keith, Chief Engineer

Measurement Driver: Jay Bledsoe, Transportation System Analysis Engineer

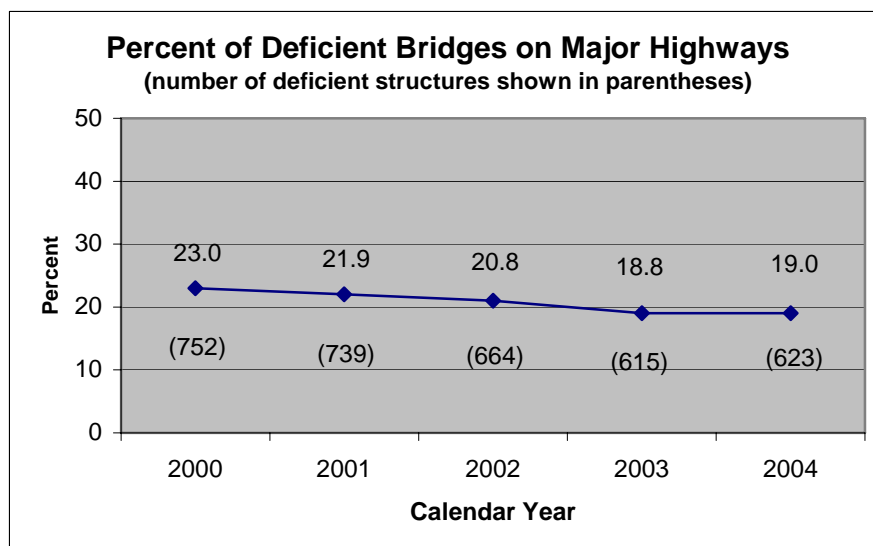
Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri's bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities.

Measurement and Data Collection:

The major highway system is defined as all routes functionally classified as principal arterials. By definition, the principal arterial system provides for statewide or interstate movement of traffic. Examples include the Interstate system or most US routes such as US 63, US 54 or US 36. In urban areas, principal arterials carry traffic entering or leaving the urban area and serve movement of vehicles between central business districts and suburban residential areas. Examples include Business 50 (Missouri Blvd.) in Jefferson City, MO 740 (Stadium Blvd.) in Columbia and Route D (Page Ave.) in St. Louis.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using FHWA criteria. A SD bridge is one that is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge is one that has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves.



**Desired
Trend:**



Smooth and Unrestricted Roads and Bridges

Percent of deficient bridges on minor highways

Results Driver: Kevin Keith, Chief Engineer

Measurement Driver: Jay Bledsoe, Transportation System Analysis Engineer

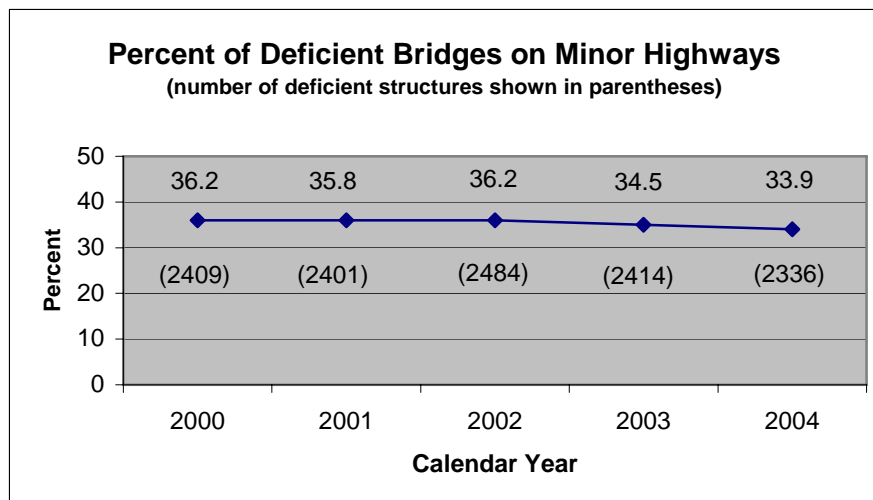
Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri's bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities.

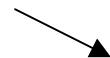
Measurement and Data Collection:

The minor highway system consists of all routes functionally classified as minor arterials or collectors. These routes serve more local transportation needs and include highways commonly referred to as lettered routes, such as Route A, Route C and Route DD. The public sometimes refers to these routes as farm-to-market roads.

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using FHWA criteria. A SD bridge is one that is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge is one that has poor roadway alignment, or has clearance or width restrictions that no longer meet the usual criteria for the system it serves.



*Desired
Trend:*



Smooth and Unrestricted Roads and Bridges

Number of deficient bridges on the state system (major & minor highways)

Results Driver: Kevin Keith, Chief Engineer

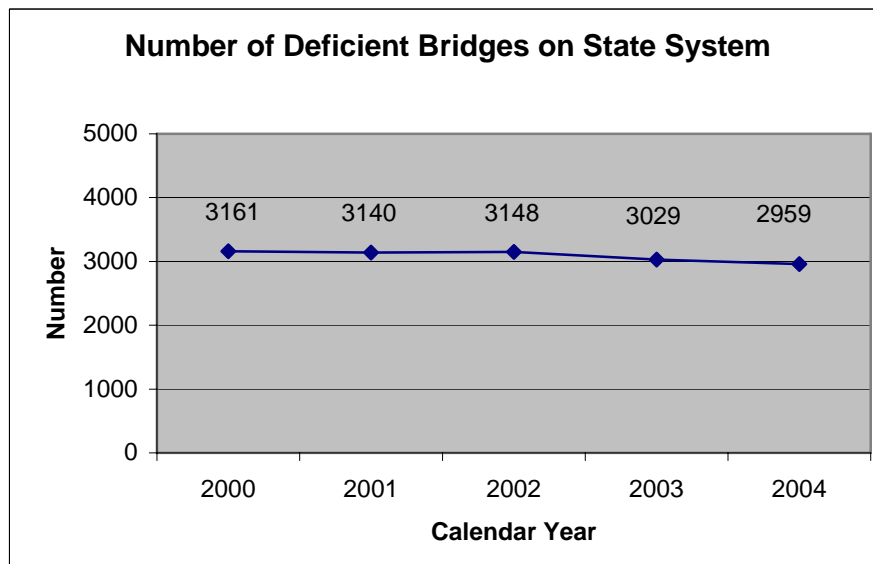
Measurement Driver: Jay Bledsoe, Transportation System Analysis Engineer

Purpose of the Measure:

This measure tracks progress toward improving the condition of Missouri's bridges. The public has indicated the condition of Missouri's existing roadway system should be one of the state's highest priorities.

Measurement and Data Collection:

A bridge is considered deficient if it is either structurally deficient (SD) or functionally obsolete (FO) as defined using FHWA criteria. A SD bridge is one that is in poor condition or has insufficient load capacity when compared to modern design standards. A FO bridge is one that has poor roadway alignment or has clearance or width restrictions that no longer meet the usual criteria for the system it serves.



**Desired
Trend:**



Smooth and Unrestricted Roads and Bridges

Number of miles completed through the Smooth Roads Initiative

Results Driver: Kevin Keith, Chief Engineer

Measurement Driver: Kyle Kittrell, Transportation Planning Director

Purpose of the Measure:

This measure will determine how many centerline miles of roadway have been improved as a result of the Amendment 3 Smooth Roads Initiative.

Measurement and Data Collection:

The first set of Smooth Roads Initiative projects were awarded in February 2005. Data collection on this measure will begin May 1, 2005 with reporting as soon as SRI projects are completed. Data may be reported as soon as the July 2005 Tracker, but no later than the October 2005 Tracker. All of the Smooth Roads Initiative projects should be completed within three years.

**Measure is Under
Development**

